IN THE CLAIMS

1.   (Currently amended) An aircraft fault monitoring system comprising:

a fault detection mechanism for providing a fault status indication of a monitored discrete aircraft operating parameter ~~to be monitored~~;

an integrator for incrementing a count in one direction by a predetermined fault increment when the fault detection mechanism provides a fault indication in relation to said parameter, and for incrementing said integrator count in an opposite direction by a predetermined no-fault increment in the absence of fault detection;

a threshold detector for generating a hard fault indication when the integrator count reaches a threshold value in relation to said parameter;

a sub-threshold detector for generating a further fault indication in relation to said parameter when the integrator count lies between the threshold value and a sub-threshold value set below the threshold value;

an integrator count monitor for generating information indicative of the state of the integrator count when ~~below~~ between the threshold value and the sub-threshold value, thereby to provide an indication of a non-hard fault condition in relation to said parameter; and ~~the progression of the fault~~

a correlator for correlating said information generated by the integrator count monitor with system operating parameters so as to provide a fault status or a diagnostic in response to the correlation.

2.   (Canceled)

3.   (Currently amended) The system of claim ~~2~~ 1 wherein the predetermined fault increment is greater than or equal to the predetermined no-fault increment.

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4.   (Canceled)

5.   (Currently amended) The system of claim 4 1 wherein said information indicative of the state of the integrator count is the frequency with which the integrator count exceeds the sub-threshold value.;

6.   (Currently amended) The system of claim 4 1 wherein said information indicative of the state of the integrator count is the total time said sub-threshold value is exceeded.

7.   (Currently amended) The system of claim 4 wherein said information indicative of the state of the integrator count is the maximum continuous period the integrator count exceeds said sub-threshold value.

8   (Currently amended) The system of claim 2 1 wherein the correlating means is operative for correlating said information indicative of the state of the integrator with operating phases of the system and for generating appropriate system health messages.

9.   (Original) The system of claim 1 wherein the integrator count monitor is operative to generate an indication of the ratio between the count in the one direction and the count in the opposite direction for providing information as to the direction of the progression of the sensed fault relative to a hard fault condition.

10.   (Original) The system of claim 9 wherein the predetermined fault increment is greater than or equal to the predetermined no-fault increment.

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11. (Canceled

12. (Canceled

13. (Original) The system of claim 9 wherein the ratio is an averaged ratio over a predetermined period of time.

14. (Original) The system of claim 9 wherein the ratio is an averaged ratio for the duration of a specified system operating condition.

15. (Currently amended) A method of providing an indication of the progression of a discrete aircraft operating parameter fault, the method comprising: monitoring a said parameter to detect the fault; incrementing an integrator count in one direction when the fault is detected; incrementing the integrator count in an opposite direction in the absence of fault detection; generating a hard fault indication when the integrator count reaches a threshold value; generating a near hard fault indication when the integrator count exceeds a sub-threshold value; and generating information, in respect of said parameter, indicative of a non-hard fault condition when the state of the integrator count is between when below the threshold value and the sub-threshold value.

16. (Original) The method of claim 15 further comprising correlating said information indicative of the state of the integrator count with system operating parameters; and providing a fault status or diagnostic in response to the correlation.

17.   (Original) The method of claim 15 wherein generating information indicative of the state of the integrator count includes generating an indication of the ratio between the count in the one direction and the count in the opposite direction thereby providing information as to the direction of the progression of the sensed fault relative to a hard fault condition.

18.   (Original) The method of claim 17 wherein generating an indication of the ratio between the count in the one direction and the count in the opposite direction includes averaging the ratio over a predetermined period of time.

19.   (Original) The method of claim 17 wherein generating an indication of the ratio between the count in the one direction and the count in the opposite direction includes averaging the ratio for the duration of a specified system operating condition.

20.   (Canceled)